COUNTY OF LOS ANGELES • DEPARTMENT OF HEALTH SERVICES

EMERGENCY MEDICAL SERVICES AGENCY

Standing Field Treatment Protocols (SFTPs)

Student

TRAINING MATERIAL

Materials from the countywide Standing Field Treatment Protocols were based on the template program developed by Los Angeles Fire Department in April, 1997 under the direction of Marc Eckstein, M.D., Medical Director. In 2011, the Treatment Protocols were developed by combining the Base Hospital Treatment Guidelines (BHTG) and the Standing Field Treatment Protocols (SFTP). Complete listing of the Treatment Protocols is located in the Prehospital Care Manual, Reference No. 1200.

July 2011

Standing Field Treatment Protocol Portion of the *Los Angeles County EMS Agency* Treatment Protocols

Prehospital Care Manual, Reference Numbers 1200

2011

STANDING FIELD TREATMENT PROTOCOLS (SFTPs) ARE TO BE USED **ONLY** BY PARAMEDICS EMPLOYED BY PARAMEDIC PROVIDER AGENCIES WHICH HAVE BEEN APPROVED AS SFTP PROVIDERS.

Paramedics who utilize these protocols without authorization are considered to be functioning outside of the Paramedic Scope of Practice.

Suggested Training Schedule

- Phase One
  - I. Introduction
  - II. Questions & Answers
  - III. Teaching Points
  - IV. SFTP Review
  - V. Introduction To Scenarios
- Phase Two
  - I. General Review
  - II. Participant Questions
  - III. Scenarios / Discussion

Phase One

I. INTRODUCTION

GOALS

- Allows paramedics to provide additional patient care using Treatment Protocol steps before base hospital contact is required or recommended
- Develops an understanding of the revised Treatment Protocols and how to apply them utilizing structured scenarios

OBJECTIVES

- **At the completion of this training program, participants will be able to:**
  - Understand the rationale for use of the SFTP component of the treatment protocols
  - Identify information that must be reported to hospitals receiving protocol patients
  - Discuss the issue resolution process for SFTPs
  - Discuss appropriate interventions for each Treatment Protocol

Phase One

II. QUESTIONS & ANSWERS

SFTPs are:

- Integrated into the Los Angeles County Treatment Protocols
- Based on presenting signs/symptoms and chief complaint
- To expedite and improve field care by eliminating or delaying base contact on **16** common chief complaints

Things to Remember:

- Utilize Reference No. 806.1, Procedures Prior to Base Contact, when appropriate
- Do the basics: Airway, O2, reassessment
- Assess perfusion status
- Combine protocols if the patient's condition warrants
- Document thoroughly
- Establish saline locks, when appropriate
- Transport when/where appropriate

Question #1

Why Use SFTPs?

- Expedites patient care by allowing approved providers to move quickly through the Treatment Protocols
- Eliminates multiple treatment guidelines with conflicting instructions
- Increases patient care focus by reducing time spent on radio communications

Question #2

How Did SFTPs Come About? Which Providers Are Using SFTPs?

• Los Angeles Fire Department	(April 1997)
• Culver City Fire Department	(January 1998)
• Burbank Fire Department	(October 1998)
• Long Beach Fire Department	(April 1999)
• Alhambra Fire Department	(April 1999)
• San Marino Fire Department	(June 1999)
• West Covina Fire Department	(Feb. 2000)
• Los Angeles County Sheriff's Dept.	(May 2005)
• Santa Monica Fire Department	(January 2006)
• Downey Fire Department	(August 2008)
• Torrance Fire Department	(November 2008)
• Santa Fe Springs Fire Dept.	(January 2009)
• La Verne Fire Department	(February 2011)

Question #3

Prerequisites for Paramedics to Use SFTPs

- At least one member of each two-paramedic SFTP team must have a minimum of one year experience as a paramedic
- Both paramedics must be accredited in LA County
- Both paramedics must have completed SFTP training
- Only LA County approved SFTPs can be utilized
- If the unit is operating under a staffing exception (one paramedic), the SFTP portion of Treatment Protocols cannot be used
- Two paramedics from **different** paramedic provider agencies are not an SFTP team and may not use the SFTP component

Question #4

How do SFTPs Change Paramedic Responsibilities?

- Increases paramedic autonomy AND accountability
- Each SFTP Patient Requires:
  - ✓A complete assessment with thorough documentation
  - ✓Accuracy in documentation - there is no audio-recording

Question #5

Which Chief Complaints Are Addressed in SFTPs?

Medical

- 1202 General ALS
- 1210 Non-Traumatic Cardiac Arrest
- 1243 Altered Level of Consciousness
- 1244 Chest Pain
- 1247 Overdose/ Poisoning
- 1248 Pain Management
- 1249 Respiratory Distress
- 1250 Seizure (Adult)
- 1251 Stroke/Acute Neurological Deficits

Medical/Peds/Trauma

- 1252 Syncope
- 1261 Emergency Childbirth (Mother)
- 1262 Emergency Childbirth (Newborn/Neonatal Resuscitation)
- 1264 Pediatric Seizure
- 1271 Burns
- 1275 General Trauma
- 1277 Traumatic Arrest

Question #6

Which Chief Complaints Are NOT Covered Under SFTPs?

- All symptomatic dysrhythmias
- Poor perfusion (excluding Trauma)
- Environmental situations
- Agitated Dilirium
- Allergic Reactions
- Crush Syndrome
- Dystonic Reaction
- Non-Traumatic Hypotension
- Pediatric Arrest
- Pediatric symptomatic bradycardia / trachycardia

Question #7

Base Hospital Required

- Establish base hospital contact when:
  - Indicated by the Treatment Protocol
  - Unlisted treatments are required
  - Signs/Symptoms not clearly addressed in protocol
  - Consultation with the base hospital would be helpful
  - Specialty Centers destination and notification
    - ST Elevation Myocardial Infarction (STEMI) (SRC)
    - Acute Stroke Centers (ASC)

Question #8

Mandatory Base Contact After Implementing Protocol

- Patient initially stable and treated; then develop poor perfusion
- **All medical patients with poor perfusion require Base Contact**

Question #9

Base Hospital Requesting Full Report on SFTP Patient

- Provide additional information as requested
- If interpersonal issues arise, address them with the individual, the PCC and/or the paramedic coordinator at the conclusion of the run, not during

Question #10

Paramedic Wanting Second Opinion

- If paramedics feel uncomfortable for **any** reason or have questions about an aspect of patient care, establish base contact at any point in the Treatment Protocol
- All treatments rendered prior to contact should be reported to the base hospital

Question #11

Obtaining Hospital Diversion Status

- Each provider agency has a department-specific plan for identifying hospitals on diversion
- Current mechanisms:
  - Agreement with base hospital
  - Agreement with receiving hospital
  - ReddiNet in dispatch
  - ReddiNet in each ALS Unit

Question #12

Hospital Notification

- Each provider agency has a department-specific plan on the mechanism in which the provider is to notify the receiving hospital
- Report the following:
  - Protocol Name and Number
- Patient reports are based on the type of patient
  - Medical Protocol Patient
  - General Trauma Protocol Patients
    - Non-Trauma Center Criteria
    - Trauma Center Criteria

Question #12

Hospital Notification
(Medical Protocol Patients)

- Provider Code/Unit #
- Sequence Number
- Age/Gender
- **Name or Treatment Protocol number (4 digits)**
- Level of Distress
- Destination/ETA
- Report STEMI patient if the 12-lead ECG indicates
- Report mLAPSS positive if exam indicates

Question #12

Hospital Notification
(General Trauma: Non TC Criteria)

- Provider Code/Unit #
- Sequence Number
- Age/Gender
- Level of distress
- Mechanism of Injury/Chief Complaint
- Location of injuries
- Destination/ETA

Question #12

Hospital Notification
(General Trauma:TC Criteria)

- Provider Code/Unit #
- Sequence Number
- Age/Gender
- Level of distress
- Mechanism of Injury/Chief Complaint
- Location of injuries / Region(s) of the Body Affected
- Complete vital signs/GCS
- Airway adjuncts utilized
- Pertinent information (flail segment, rigid abdomen, evisceration)
- Destination / ETA

Question #13

Trauma Center Protocol Usage

- Patients **must** be transported to the trauma center if they meet:
  - Trauma Criteria
  - Trauma Guidelines
  - Paramedic Judgment
- In most cases, paramedics will contact the trauma center directly
- General Trauma Protocol (1275) is used whether or not patients meets Trauma Center Criteria

Question #14

Against Medical Advice

- Establish base contact for patients who meet Ref. No. 808, Section I, criteria
- Documentation **MUST** be complete (high risk incidents)

Question #15

Transfering Care to a Non-SFTP Provider

- **Base Contact IS required**
- Give full report and advise the base hospital that patient care is being transferred to a non-SFTP provider
- The non-SFTP provider must make Base Contact for further orders or if patient's condition deteriorates

Question #16

Transfering Care to One Paramedic in BLS Unit

- SFTPs may be utilized **only** if two qualified SFTP paramedics are on scene
- If SFTP was initiated and pt care is transferred to a single paramedic, the transporting medic can continue with same protocol
- If there are further orders are needed or patient's condition deteriorates, the single paramedic must make **Base Contact**

Question #17

Can Paramedic Interns Utilize SFTPs?

- Yes, however:
  - Inform the intern that the SFTP portion of the Treatment Protocol **may only be utilized by approved SFTP providers**
  - Interns are not evaluated on their knowledge of SFTPs
  - Allow paramedic interns to perform radio communication skills

Question #18

SFTP Quality Improvement

- Provider Agency review
- Outcome data from base and receiving hospitals
- EMS Agency review

Phase One

III. TEACHING POINTS

SFTPs: Component of the Treatment Protocols

- SFTPs are now an integral part of the Los Angeles County Treatment Protocols
- Treatment Protocols must be followed as written
- Non-SFTP providers must establish base contact at the first point it is indicated in the Treatment Protocol
- Approved SFTP providers may continue the steps of the protocol until "**Base Contact All**" is reached. Contact the base at that point
- Continue to reassess the patient after each medication or treatment and throughout the call

Determination of Perfusion

Perfusion status: combination of parameters
(Blood pressure, heart rate, tissue color and mentation)

- **Perfusion**: adequate circulation of blood through organs and tissues, manifested by normal pulse, tissue color, level of consciousness and blood pressure
- **Poor Perfusion**: inadequate circulation of blood through organs and tissues, manifested by abnormal pulse, tissue color, level of consciousness, blood pressure, chest pain and shortness of breath
- Initiate **Base Contact** on poorly perfusing patients or if perfusion status is borderline

Phase One

IV. SFTP REVIEW

1202, General ALS

Generally patients with vague complaints. Provide:

- Basic and advanced airway management PRN
- Cardiac monitor PRN
- Venous access PRN
- ✓ Blood Glucose PRN
- **Zofran**
- **Base Contact** as directed in the protocol

New Medication
General ALS Protocol

Zofran

(*Ondansetron*)

- Indications: Nausea and/or vomiting
- Routes: IV, IM or ODT (orally disintegrating tablets)
- Dose (4 yrs and older): 4mg IV, IM or ODT
- Maximum Dose: 4mg (all routes)

1210, Non-Traumatic Cardiac Arrest

- Unwitnessed by EMS: provide two minutes of CPR at a compression rate of at least 100/min prior to defibrillation. Minimize interruptions to chest compressions
- Advanced airway and capnography
- **Atropine:** DELETED from treatment of non-traumatic cardiac arrest
- Pulse check if rhythm change; take no longer than 10sec to check a pulse; immediately resume chest compressions if no pulse detected
- Consider IO early - if unable to establish an IV

1210, Non-Traumatic Cardiac Arrest cont

- Provide 2 minutes of CPR between any interventions
- If resuscitative efforts are successful, perform a 12-lead ECG
- ALL Post cardiac arrest patients with ROSC
  - Transport to most accessible open SRC (if ground transport 30 min or less)
  - With or without a 12-lead ECG of "Acute MI"
- **Base Contact** If resuscitative efforts are unsuccessful, to consider pronouncement

1243, Altered Level of Consciousness

- Use the appropriate protocol, if assessment indicates:
  - 1247, Overdose/Poisoning
  - 1250, Seizure (Adult)
  - 1251, Stroke/Acute neurological deficit
- ✓ Blood Glucose – if less than 60mg/dl give:
  - **Dextrose** 50% 50ml slow IV push
- If no IV access:
  - **Glucagon** 1mg IM
- If strong suspicion of narcotic OD:
  - Use OD/Poisoning protocol (Ref. No. 1247)
- **Base Contact** as directed in the protocol

1244, Chest Pain

- Suspected cardiac related pain (greater than 30 yrs):
  - Steps 1-10
  - 12-lead ECG
  - **NTG*** x3 / **ASA*** 162mg / **MS*** 2-12mg
  - If CP continues after max MS, **Base Contact** required
- Suspected cardiac related pain (less than 30 yrs):
  - Steps 1-6 only (O2, Monitor, IV, 12 Lead)
  - **Base Contact** for medication orders
- Suspected non-cardiac pain (all ages):
  - Steps 1-4 only (O2, Monitor, IV)

1244, Chest Pain cont

*Nitroglycerin

- Dose: 0.4mg SL, every 3-5 min, max 3 doses.
- HOLD If:
  - SBP < 100
  - SED within 48 hours
- If hypotension develops, place patient supine and make **Base Contact**
- Reassess vital signs
- **DO NOT** include NTG taken prior to EMS arrival
- May give prior to establishing venous access

1244, Chest Pain cont

*Aspirin

- Dose: 162 mg PO / chewable
- Used for anticoagulant effect (not pain relief)
- Give even if patient:
  - Has taken their own ASA
  - Is on anticoagulants
- Contraindications:
  - GI bleeding
  - Ulcer disease
  - ASA allergy

1244, Chest Pain cont

***Morphine**

- Dose: 2-12 mg slow IVP (titraite)
- Repeat every 5 minutes (✓ VS)
- Maximum: 20 mg
- Use Caution if: SBP < 100 systolic
- MS given ONLY after 3 doses of NTG are documented ineffective
- Observe respiratory status
- Doses, repeat doses and contraindications are included on the protocol each time the drug is indicated

Medical SFTP Deleted

- M7, Non-traumatic Abdominal Pain
  - Has been deleted as a separate Treatment Protocol
  - Medication for abdominal/flank pain is addressed in **Pain Management** protocol (1248)

1247, Overdose/Poisoning

- Protect airway/cardiac monitor
- Check blood glucose; treat as indicated by the protocol
- **Narcan** administration
  - Dose: 0.8-2mg: IV 2mg: IM or IN
  - Used to increase the rate and depth of respiration
- SFTP providers may continue to Step14
- **Base Contact** if drugs for specific history are needed

1248, Pain Management

- Consider non-invasive pain management techniques
- Treatment Protocol addresses pain management by directing field personnel to a specific treatment protocol:
  - ✓ Burn injury (1271)
  - ✓ Chest pain (1244)
  - ✓ Emergency child birth - Abdominal pain in the pregnant patient (1261)
  - ✓ Non-traumatic abdominal pain, the SFTP provider may consider use of **Morphine sulfate**

1249, Respiratory Distress

- Consider CPAP for moderate-to-severe respiratory distress with SBP = or > **90**mmHg
- Treatment Protocol is divided into four columns:
  - ✓ Stridor
  - ✓ Wheezing – if absent or diminished breath sounds due to severe bronchospasm, use this column
  - ✓ Basilar rales, cardiac etiology
  - ✓ Poor perfusion

1249, Respiratory Distress cont

- **STRIDER**:
  - New column In Respiratory Distress Treatment Protocol
  - Steps 1-8
  - Severe Resp Distress & Croup:
    - **Epinephrine*** (1:1000) via HHN
    - Hold if HR >200
    - See charts for specific dose, based on age
  - SFTP providers may continue the treatment steps to the end of the Stridor column

1249, Respiratory Distress cont
New Treatment

*Inhalation Epinephrine

- Epinephrine 1:1000 (1mg/mL)
- Indications: Severe respiratory distress with Croup (What is Croup?)
- Age Greater than 1 year:
  - 5 mg diluted in 5 mL NS
- Age Less than 1 year:
  - 2.5 mg diluted in 5 mL NS
- Hand-held Nebulizer
- **Total Dose: 5 mg**
- **Hold if HR greater than 200 bpm**

1249, Respiratory Distress cont

- **WHEEZING**
  - **Albuterol 5mg**
    - Hand held nebulizer or hand held mask
    - Consider cardiovascular effects
    - Reevaluate lung sounds frequently
  - **Epinephrine (1:1000) 0.3mg IM**
    - Used when ***deteriorating*** after 1st Albuterol

1249, Respiratory Distress cont

- **BASILAR RALES** – Cardiac Etiology
  - ***Nitroglycerin** SL
    - Dose is BP dependant
  - Consider non-cardiac causes for rales
    - pneumonia is the most common
  - If Wheezing – Think: Possible pulmonary edema
    - **Albuteral 5mg HHN**
    - ✓ Breath sounds frequently
  - Monitor cardiovascular status carefully!
  - **Base Contact ?**

1249, Respiratory Distress cont

***Nitroglycerin**

- Aggressive **NTG** therapy is utilized to reduce preload and afterload
- 0.4 mg spray every 3 - 5 minutes X 3
- Hold if SBP < 100 / patient taking sexually enhancing drugs (SED)
- If hypotension develops - elevate legs and make **Base Contact**

1250, Seizure (Adult)

- Appropriate airway management
- ✓ Blood glucose; treat per protocol
  - **Midazolam**
    - 2-5mg slow IVP (active seizures / **severe** post-ictal agitation)
    - 5 mg IN or IM (if no IV available)
    - (maximum dose 10mg – all routes)
  - **Dextrose 50%** 50mL (BS <60)
  - **Glucagon** 1mg IM (If no IV and BS <60)
- Approved SFTP providers continues past Step 10
- When would you make **Base Contact**?
- When would a Trauma Center be considered?

1251, Stroke/Acute Neurological Deficits

- Document neurological assessment (mLAPSS)
  - Transport to nearest ASC if criteria met
- Document time of symptom onset
- ✓ Blood Glucose, treat per protocol
- If patient meets inclusion criteria for the FAST MAG Trial Study, contact the FAST MAG physician on call
- ASC notification
- If shock, refer to Ref. No. 1246, Non-traumatic Hypotension Treatment Protocol

1252, Syncope

- If shock, refer to Ref. No. 1246, Non-traumatic Hypotension Treatment Protocol (Base Contact required for this protocol)
- ✓ Blood Glucose, treat per protocol
- Cardiac monitor, document rhythm, attach strip if dysrhythmia identified
- Approved SFTP providers may proceed past Step 9, and repeat **Dextrose** if needed

1261, Emergency Childbirth - Mother

- Immediate **Base Contact** if:
  - abnormal presentation
  - multiple gestation
  - maternal hypotension
- If suspected eclampsia, DO NOT delay transport for treatment
- If delivery occurs in the field, transport mother and newborn to a Perinatal Center with an EDAP designation (Reference No. 511, Perinatal Patient Destination)

1262, Newborn/Neonatal Resuscitation

- **Pulse Under 100 bpm**:
  - BVM
    - If poor respiratory rate or
    - cyanotic
  - Reassess Every 30 seconds. Need for CPR or assisted ventilations
  - **If Pulse remains under 100:**

  ESTABLISH BASE CONTACT (ALL)

- **Apneic or Pulse 60 - 100**
  - BVM
  - Recheck pulse
  - **If Pulse remains under 100:**

  ESTABLISH BASE CONTACT (ALL)

1262, Newborn/Neonatal Resuscitation cont

- **Pulse Under 60 bpm**
  - BVM
  - If pulse remains under 60 bpm
    - Chest compressions (120/min at a 3:1 ratio)
  - If pulse greater than 60 bpm
    - Discontinue compressions, but continue BVM
  - **ESTABLISH BASE CONTACT (ALL)** if pulse remains under 100 bpm

1264, Seizure (Pediatric)

- Assist respirations (prn)
- Assess for possible PMC criteria
- If no fever, ✓ Blood Glucose
- Febrile seizures?
- If active seizure: **Midazolam** administration
  - 0.1 mg/kg slow IVP, IM, IN
  - Pediatric Resuscitation Tape (BROSLOW™) - **weight & color only**
  - **Refer to Color Code Charts for medication dosage**
  - Reassess, document VS, and respiratory effort/tidal volume

1264, Seizure (Pediatric) cont

- **Narcan** administration
  - Give if hypoventilation with strong suspicion of narcotic overdose
  - Slow IV, IM or IN (0.1mg/kg)

1271, Burns

- Use appropriate column (Thermal, Chemical or Electrical)
- Transport to Trauma Center/PTC, if patient meets criteria or guidelines
- If patient does not meet TC/PTC criteria, transport to closest, most accessible receiving facility appropriate to age.

1271, Burns

- Use appropriate column (Thermal, Chemical or Electrical)
- Transport to Trauma Center/PTC, if patient meets criteria or guidelines
- If patient does not meet TC/PTC criteria, transport to closest, most accessible receiving facility appropriate to age.
- High flow O2
  - Essential with known or potential respiratory injury
  - If evidence of inhalation injury, facial burn, singed nasal hair or soot in the oropharynx, be aware of the potential for rapid respiratory deterioration.
- Fluid Challenge: (prn) (Base Contact not required)
  - **Adult**: 10mL/kg **Peds**: 20mL/kg
- **Morphine**
  - **Adult:** 2-12mg Slow IV/IM **Peds:** 0.1mg/kg IV/IM

Trauma Protocols Deleted

- Minor Trauma (T2)
  - Deleted as a separate protocol
  - Integrated into General Trauma (1275)
- Major Trauma (T3)
  - Deleted as a separate protocol
  - Integrated into General Trauma (1275)

1275, General Trauma

- **Do not delay** transport for treatment (treat enroute)
- DO NOT DELAY TRANSPORTING patients with Penetrating torso trauma with hypotension in order to apply spinal immobilization
- **Trauma Center notification** must be established for all patients who meet Trauma Criteria and/or guidelines. Generally, this is the designated Trauma Center.
- If patient meeting Trauma Center Criteria has sustained minor injuries, **Base Contact** must be made with full report in order to consider diverting from a Trauma Center.
- All treatment should occur enroute!
  - **Morphine**
  - Fluid Challenge

1275, General Trauma cont

- Determine diversion status of receiving hospital or trauma center to make early notification
- Basic and advanced airway management
- Control bleeding
- Cardiac monitor (prn)
- If patient is ALOC, consider other medical protocols (ALOC / 1243 and OD / 1247)

1277, Traumatic Arrest

- **Consider Ref. No. 814, Determination/ Pronouncement of Death in the Field**
- Advanced Airway - If unable to maintain basic airway
- Defibrillate – If V-fib or Pulseless V-Tach
- **NO MEDICATIONS**
- Needle Thoracostomy - If chest trauma and difficult ventilation and/or diminished breath sounds
- Fluid Resuscitation - Consider immediate placement of IO if any difficulty or delay in IV access.

V. Introduction to Scenarios

End of Phase One

Phase Two

I. General Review

Prerequisites for Paramedics to Utilize SFTPs

- Both paramedic must be employed by an SFTP provider
- Both Paramedics must be trained in Los Angeles County SFTPs (Phase One and Phase Two)
- At least one member of the paramedic team must have a minimum of one year experience working as a paramedic

Base Contact Required

- If unlisted treatments are needed or would be beneficial
- Complex signs/symptoms which are not clearly addressed in a protocol
- Consultation with the base hospital would be advantageous
- If a **medical** patient exhibits signs of poor perfusion

SFTPs are:

- Now integrated into the Treatment Protocols and no longer exist as separate protocols
- Still based on presenting signs/symptoms and chief complaint
- A way to expedite and improve field care by delaying base contact on **16** common chief complaints

Perfusion Status

Determined by a COMBINATION OF:

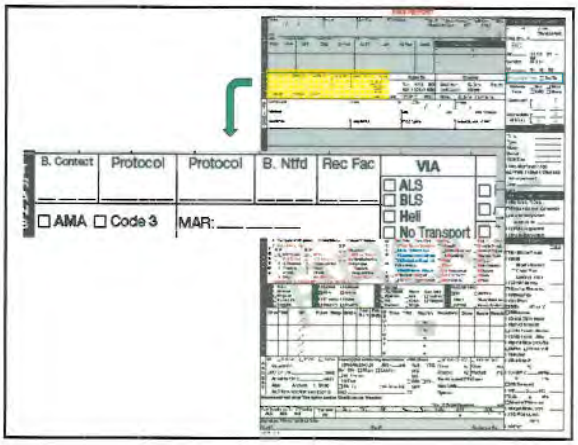
- Blood pressure
- Heart rate/pulse quality
- Tissue color
- Mental status

Issue Resolution

- Discuss with involved Individuals *after* Base Contact has concluded
- Discuss with PCC and Paramedic Coordinator
- Submit an EMS Agency Situation Report if unable to resolve

EMS Report Form Documentation

- "B. Contact" box
  - If utilizing SFTP protocol, insert "PRO"
  - If base contact was established for medical control, insert the three-letter hospital designator
- "Protocol" box
  - Document the four-digit protocol number (ie., 1244)
  - If PCR has only 3 spaces in the "Protocol" box, enter the last three numbers of the protocol (ie., 244)
  - Additional protocols are documented in subsequent "Protocol" box

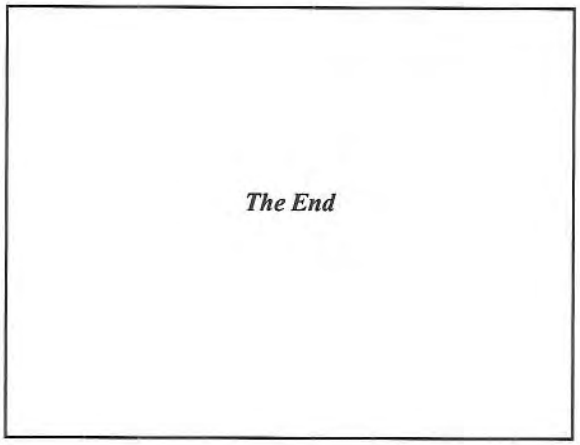


Phase Two

II. PARTICIPANT QUESTIONS

Phase Two

III. SCENARIOS / DISCUSSION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